Amendments to the Specification:

Please replace the paragraph beginning on page 14, line 20, with the following amended paragraph:

Sequence homology (or identity) may moreover be determined using any suitable homology algorithm, using for example default parameters. Advantageously, the BLAST algorithm is employed, with parameters set to default values. The BLAST algorithm is described in detail on the worldwide web at ~~http://www.ncbi.nih.gov/BLAST/blasthelp.html~~ ncbi.nih.gov/BLAST/blasthelp.html, which is incorporated herein by reference.

Please replace the paragraph beginning on page 21, line 8, with the following amended paragraph:

Separating cells using magnetic capture may be accomplished by conjugating a molecule which binds to5T4 antigen to magnetic particles or beads. For example, the5T4 binding agent may be conjugated to superparamagnetic iron-dextran particles or beads as supplied by Miltenyi Biotec GmbH. These conjugated particles or beads are then mixed with a cell population which may express 5T4. If a particular cell expresses 5T4, it will become complexed with the magnetic beads by virtue of this interaction. A magnetic field is then applied to the suspension which immobilises the magnetic particles, and retains any cells which are associated with them via the covalently linked antigen. Unbound cells which do not become linked to the beads can be washed away or collected separately, leaving a population of cells which is isolated by virtue of the expression of 5T4. Reagents and kits are available from various sources for performing such isolations, and include Dynal Beads (Dynal AS; on the worldwide web at dynal.no ~~http://www.dynal.no~~), MACS-Magnetic Cell Sorting (Miltenyi Biotec GmbH; on the worldwide web at mitenylbiotec.com ~~http://www.miltenyibiotec.com~~), CliniMACS (AmCell; on the

worldwide web at amcell.com ~~http://www.amcell.com~~) as well as Biomag, Amerlex-M beads and others.

Please replace the paragraph beginning on page 21, line 23, and ending on page 22, line 5, with the following amended paragraph:

Fluorescence Activated Cell Sorting (FACS) can be used to isolate cells on the basis of their differing surface molecules, for example surface-displayed 5T4. Cells in the sample or population to be sorted are stained with specific fluorescent reagents which bind to5T4. These reagents would be the5T4 binding agent linked (either directly or indirectly) to fluorescent markers such as fluorescein, Texas Red, malachite green, green fluorescent protein (GFP), or any other fluorophore known to those skilled in the art. The cell population is then introduced into the vibrating flow chamber of the FACS machine. The cell stream passing out of the chamber is encased in a sheath of buffer fluid such as PBS (Phosphate Buffered Saline). The stream is illuminated by laser light and each cell is measured for fluorescence, indicating binding of the fluorescent-labelled antigen. The vibration in the cell stream causes it to break up into droplets, which carry a small electrical charge. These droplets can be steered by electric deflection plates under computer control to collect different cell populations according to their affinity for the fluorescent labelled binding agent. In this manner, cell populations which express 5T4 can be easily separated from those cells which do not express 5T4. FACS machines and reagents for use in FACS are widely available from sources worldwide such as Becton-Dickinson, or from service providers such as Arizona Research Laboratories (on the worldwide web at arl.arizona.edu/facs/ ~~http://www.arl.arizona.edu/facs/~~).

Please replace the paragraph on page 37, line 7, with the following amended paragraph:

~~**Figure 22** shows~~ **Figures 22a and 22b** show morphology of human ES colonies.